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Pilot Alcohol Violations Reported in U.S. Newspapers, 1990–2006

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Abstract

Introduction—Alcohol violations by airline pilots are rare yet remain a public concern. Such incidents often generate widespread news coverage. This study examines the frequency and characteristics of alcohol violation incidents involving airline pilots reported in U.S. newspapers.

Methods—The database of Lexis-Nexis™, which contains full-text articles for over 350 newspapers, was searched to identify alcohol violation incidents involving airline pilots in the U.S. between January 1990 and June 2006. Information pertaining to the pilot, flight, blood alcohol concentration (BAC), and consequence was ascertained for each incident based on the newspaper coverage.

Results—During the study period, newspapers reported on a total of 13 incidents of alcohol violations involving 17 pilots. All but two of the incidents occurred during January 2002 through June 2006. The majority (85%) of the incidents were first identified by airport personnel, such as security screeners, based on suspicion of alcohol use by the pilot. Subsequent alcohol testing revealed a mean BAC of 90 mg/dL (ranging from 10 mg · dL⁻¹ to 182 mg · dL⁻¹). Of the 17 pilots, 6 were known to be prosecuted criminally, including 5 who were sentenced to jail terms.

Discussion—Incidents of alcohol violations by airline pilots reported in U.S. newspapers have increased in recent years. This increase is likely due in part to increased detection resulting from enhanced aviation security and enforcement following the September 2001 terrorist attacks.

Keywords

alcohol; aviation; pilots

The Dangers associated with alcohol use by pilots have been previously described (3–5). Federal regulation prohibits any individual from acting or attempting to act as a flight crewmember within 8 h of consuming alcohol, or while having a blood alcohol concentration (BAC) of 40 mg · dL⁻¹ or greater. In addition, airline pilots are subject to various alcohol testing programs as mandated by the 1991 Omnibus Transportation Employee Testing Act. Random testing during 1995 through 2002 has revealed that the prevalence rate of alcohol violations among airline pilots is about 0.03% (29 out of 108,407) (Hecht S. Personal communication. Federal Aviation Administration, 2004).

Alcohol use has been implicated in several fatal crashes of airline flights outside of the United States. One of the highly publicized incidents was the crash of China Airlines Flight 140 (April 26, 2004, Nagoya, Japan) that killed 264 people, in which the Captain had a post mortem BAC of 13 mg · dL⁻¹ and the First Officer had a post mortem BAC of 55 mg · dL⁻¹ (7,9). Alcohol, however, was not listed as a contributing factor for the China Airlines Flight 140 crash because

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it was unclear whether the positive BACs resulted from pre-accident ingestion or post mortem fermentation. Although aviation is by far the safest mode of transportation, public concern about aviation safety is extremely high. Incidents of alcohol-impaired pilots often generate widespread news coverage. As a tool of mass communication, newspapers have been recognized as a valuable data source for injury and risk factor surveillance (6,8). The purpose of this study was to examine the incidents of alcohol violations involving airline pilots reported in U.S. newspapers from January 1990 through June 2006.

Methods

Lexis-Nexis™ Academic is a web-based, searchable archive that provides full-text documents from over 5900 news, business, legal, medical, and reference publications, including full-text for more than 350 newspapers. Using the “Guided News Search” option of Lexis-Nexis™ Academic (2), we performed a retrospective study of newspaper articles printed between January 1990 through June 2006 that contained various combinations of the following terms in the headline or body of the article: “intoxicated”; “drunk”; “airline pilot”; “pilot(s)”; “commercial pilots”; “airlines”; “alcohol”; and “aviation.” Data were abstracted from U.S. newspapers. All available articles were evaluated for each incident in order to increase data completion. We included all incidents that occurred in the U.S. and involved pilots of air carrier operations. This study was exempt from Institutional Review Board (IRB) review because it involved the use of publicly available data.

Data collected on each incident included: name of crewmember, sex, age, rank with airline at the time of incident, pilot residence, month, day, time of day, and year of incident, circumstances surrounding the identification of the crew member, origin and destination of flight, flight number, airline, type of plane, total passengers and crew aboard, BAC, and criminal charges and sentencing outcomes. “Alcohol violation” is defined in this study as having a blood alcohol concentration (BAC) of $40 \text{ mg} \cdot \text{dL}^{-1}$ or greater, with exception for one incident in which alcohol testing was performed several hours after the pilot was identified. Incidents that occurred outside of the United States were excluded from the analysis because international laws regarding pilot use of alcohol and alcohol testing vary.

Results

Newspapers reported on a total of 13 alcohol violation incidents involving 17 pilots during January 1990 through June 2006 (Table I). Of the 13 incidents, 11 (85%) occurred between 2002 and 2006. Of the 13 incidents, 4 (31%) involved commuter carriers providing regional service for major airlines, and the remaining 9 incidents involved major U.S. airlines. Three incidents involved two or more cockpit crewmembers on the same flights. Information on the number of passengers and crew aboard was available for 8 of the 13 incidents. A total of 862 occupants were aboard these flights, with a mean of 107 (range 19–400) occupants per flight.

All pilots involved in the alcohol violation incidents were men. Age information was available for 9 (53%) of the 17 pilots, with a mean age of 41.1 yr (range 29–55 yr). Pilot rank was also available for 9 (53%) of 17 incidents, with 3 of 9 pilots (33%) ranking as First Officers, 5 pilots (56%) ranking as Captains, and 1 pilot ranking as Second Officer. Pilots from 13 different airlines (12 U.S.-based carriers; 1 international carrier) were identified. In three incidents, pilots were prosecuted criminally, and in all incidents where information was available, pilots were suspended or terminated by their employers. Two of those three incidents resulted in jail sentences ranging from 1–5 yr (mean 22.6 mo), and one guilty plea resulted in a suspended sentence of 6 mo jail followed by a 1 yr unsupervised home probation.

Information on BAC was available for 14 (83%) of the 17 pilots identified, with the mean BAC of $90 \text{ mg} \cdot \text{dL}^{-1}$ (ranging from $10\text{--}182 \text{ mg} \cdot \text{dL}^{-1}$). Of the 13 incidents, 12 (92%) provided information about the way in which the pilots were identified. The majority of incidents (85%) were identified by airport personnel (security screeners and ground workers) who reported suspected alcohol use by pilots to airport authorities.

Discussion

The results of this study indicate that incidents of alcohol violations by airline pilots reported in U.S. newspapers have increased considerably since 2001. Between January 2002 and June 2006, a total of 11 alcohol violation incidents involving airline pilots were reported in U.S. newspapers, compared with 2 incidents reported during 1990 through 2001. One plausible explanation for the fewer incidents during the 1990s is the deterrent effect of the widespread negative news coverage of the three alcohol-impaired Northwest Airlines crewmembers on Flight 650 in 1990. The increase in newspaper-reported incidents of alcohol violations involving airline pilots in recent years is likely the result of multiple factors. First, the scrutiny of aviation safety and security following the September 2001 terrorist attacks may have increased the detection rate of alcohol violations among airline pilots. Second, given the heightened public concern about aviation safety and security after the September 2001 terrorist attacks, U.S. newspapers may have increased their reporting on aviation safety issues such as alcohol violations by airline pilots. Finally, the increase in newspaper-reported incidents of alcohol violations by airline pilots in recent years may reflect to a certain extent the increasing prevalence of alcohol violations in the pilot population. Random alcohol testing statistics compiled by the Federal Aviation Administration (unpublished data) indicate that the prevalence of alcohol violations in airline pilots has more than doubled since 1995.

Our study is limited by the availability of information in newspaper articles and by the small sample size. Not all categories of data were available for all incidents identified. The lack of complete data available is a limitation that has been identified by other researchers who have used newspapers for public health and injury surveillance (1,8). This limitation may lead to underestimating the number of passengers who are potentially at risk for boarding flights operated by an alcohol-impaired pilot. The incidence of alcohol violations among airline pilots is likely much greater than can be determined through the use of newspapers for surveillance of these incidents. Pilot alcohol violations reported in newspapers tend to be incidents detected primarily through the reasonable suspicion testing program. Violations detected by random alcohol testing are generally not covered by newspapers. The Federal Aviation Administration (unpublished data) recorded a total of 71 alcohol violations among airline pilots between 1995 and 2002, including 29 (41%) incidents detected through random testing. It is apparent that incidents reported by newspapers accounted for only a small fraction (~10%) of all incidents recorded by the Federal Aviation Administration.

Our study indicates that there has been an increase in incidents of alcohol violations by airline pilots reported in newspapers since 2001. We speculate that the increase of alcohol violations by pilots reported in newspapers is due in a large part to increased detection resulting from enhanced aviation security and enforcement following the September 2001 terrorist attacks. Future research needs to examine the epidemiology of alcohol violations among airline pilots based on surveillance data and to determine the impact of media coverage on pilots' drinking behavior.

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Characteristics of Alcohol Violation Incidents Involving Airline Pilots Reported in U.S. Newspapers, January 1990-June 2006

Table 1

Date of Incident	Number of Crew Involved	Flight Origin	Flight Destination	Number of Passengers Aboard	Crew Identified by
March 1990	3	Fargo, ND	Minneapolis/St. Paul, MN	91	Passenger
June 1994*	1	Minneapolis/St. Paul, MN	Rhineland, WI	19	Ground Worker
July 2002	2	Miami, FL	Phoenix, AZ	124	Security Screener
July 2002	1	Wilmington, NC	Atlanta, GA	27	Security Screener
August 2002	1	Little Rock, AR	Charlotte, NC	28	Security Screener
September 2002†	2	NYC-LaGuardia	Chicago, IL	—	—
December 2002	1	Norfolk, VA	Cincinnati, OH	113	Security Screener
April 2003	1	Grand Rapids, MI	Dallas, TX	—	Security Screener
December 2003	1	Washington, DC	London, UK	400	Security Screener
March 2004	1	Oakland, CA	Honolulu, HI	—	Security Screener
October 2004	1	Milwaukee, WI	St. Louis, MI	—	Crew late arriving to airport
January 2005	1	Las Vegas, NV	Atlanta, GA	60	Security Screener
April 2006	1	Los Angeles, CA	Philadelphia, PA	—	Passenger

— Data unavailable.

* Alcohol testing was performed after the flight was completed and the pilot returned to Minneapolis. The pilot was initially identified by a ground worker at the origin airport.

† Breathalyzer tests completed, no police action taken.